

SHELLFISH GROWING WATER CLASSIFICATION

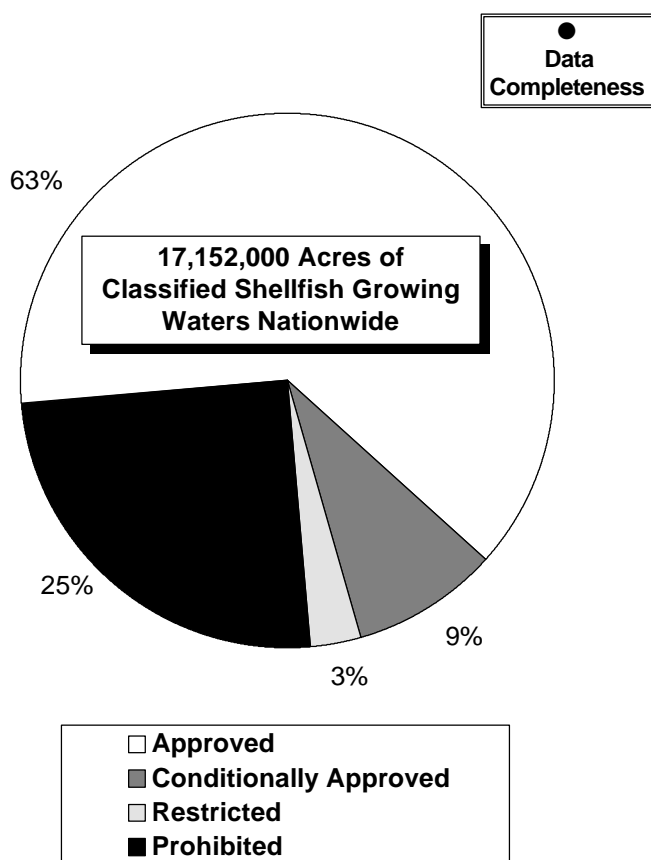
What does the indicator tell us?

This indicator shows the percentage of classified shellfish growing waters nationwide where shellfish harvesting is (1) approved (waters may be harvested for direct marketing at all times); (2) conditionally approved (waters do not meet the criteria for approved waters if subjected to intermittent microbiological pollution, but may be harvested when criteria are met); (3) restricted (waters may be harvested if shellfish are subjected to a suitable purification process); and (4) prohibited (no harvest for human consumption at any time).

Harvest-limited classifications are assigned to waters based on water quality as well as management decisions. Classifications based on water quality are supported by sanitary surveys that identify actual pollution sources and water sampling data. Management decisions include mandatory buffer zones and wastewater treatment plant outfalls, marinas, and situations in which regulations requiring current and complete sanitary surveys have not been met. Thus, in cases where it is known that water quality problems are the cause of shellfish bed closures, this indicator could be used to determine the area and extent of pollution. Closures could also help determine pollution sources with the most impact and future problems that are likely to occur if no action is taken.

In 1990, 17 million estuarine acres were classified, with 63 percent approved for shellfish harvest—a 6 percent decline from 1985. Of the other 37 percent, termed harvest-limited acreage, 9 percent were conditionally approved for harvest under certain conditions, such as season, river stage, or amount of rainfall.

INDICATOR 6: Shellfish Growing Water Classification



Source: National Oceanic and Atmospheric Administration, 1990

How will the indicator be used to track progress?

All shellfish growing waters in the United States are classified using National Shellfish Sanitation Program guidelines developed by the Interstate Shellfish Sanitation Commission (ISSC) to protect the health of people who consume shellfish, such as oysters, clams, and mussels. These guidelines are based primarily on fecal coliform bacteria levels.

The ISSC includes representatives from states, industry, and the federal government. Every 5 years, the National Oceanic and Atmospheric Administration (NOAA), in cooperation with ISSC, produces the *National Register of Classified Estuarine Waters*, which catalogs the location, current acreage, classifications, and the reasons for the classifications.

What is being done to improve the indicator?

Although data on shellfish bed closures have been collected and published since 1966 for all 23 coastal states in the *Register*, it was not until 1990 that the collection process included information on the cause of harvest restrictions. The 1995 *Register*, the most accurate to date, will be released in late 1996 and will contain data for each shellfish growing area on (1) size, (2) location, (3) spatial extent, (4) harvest classification, (5) reason for harvest restriction, (6) relative abundance of the resources, (7) contributing pollution sources, and (8) the presence or absence of restoration activities, such as pollutant input reduction measures.

To perform trend analyses using this indicator, a base year must be established and data collected in subsequent years must reflect the same parameters and protocols used in the base year. Using 1995 as the base year would provide the most accurate baseline data on reasons for harvest-restricted classifications.

This is important because harvest restricted classifications might or might not be caused by

problems with water quality. Other reasons for harvest restricted classifications include limited administrative resources, areas closed or opened for conservation purposes, or lack of a completed sanitary survey. However, accurately collecting data on the reasons for harvest restrictions ensures using only those harvest restrictions resulting from water quality problems.

In addition to the above improvements, changes should be considered in the way that NOAA collects *Register* information. Visiting all coastal states is extremely time-consuming, labor-intensive, and expensive. If all states used the same geographic information system to track all elements of each shellfish growing water, data gathering, processing, and analysis could occur on a yearly basis.

What is being done to improve conditions measured by the indicator?

Shellfish are contaminated by several pollution sources including sewage treatment plants, industrial facilities, septic systems, and nonpoint sources. The largest increases in pollution of shellfish beds between 1985 and 1990 were attributed to urban runoff, septic systems, and boat pollution.

These increases reflect a common problem for shellfish areas—the influence of increased tourism and coastal development. As a result, EPA, NOAA, and their partners will enhance the protection of the Nation's shellfish areas by focusing on and improving coastal zone management efforts.

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